IN THE CLAIMS

The claims are amended as follows:

1. (previously presented) An electronically controlled gas burner system comprising:

at least one gas burner;

a micro-electro-mechanical valve comprising a plurality of microvalves in parallel fluid communication with the gas burner; and

a microvalve controller for controlling the opening of each of the microvalves in the micro-electro-mechanical valve.

2. (original) The system of claim 1, wherein the micro-electro-mechanical valve is positioned remote from the gas burner.

3. (original) The system of claim 1, wherein the micro-electro-mechanical valve is positioned within the gas burner.

4. (original) The system of claim 1, wherein the micro-electro-mechanical valve is coupled to a plurality of gas burners.

5. (original) The system of claim 4, wherein a portion of the plurality of microvalves in the micro-electro-mechanical valve is coupled to a respective one of the plurality of gas burners.

6. (original) The system of claim 1, wherein the microvalve controller further comprises a module to selectively control an opening of each of the microvalves for controlling a gas output.

7. (original) The system of claim 1, wherein the module comprises a pulse width modulator.

8. (original) The system of claim 1, wherein the microvalve controller is further coupled to an electronic interface programmable by a user.

9. (original) The system of claim 1, wherein the microvalve controller is further coupled to a sensor positioned proximate the burner.

10. (previously presented) An electronically controlled gas burner system comprising:

at least one gas burner; and

a micro-electro-mechanical valve comprising a plurality of independently controllable microvalves in parallel fluid communication with the gas burner.

11. (canceled)

12. (previously presented) The gas burner of claim 10, further comprising a microvalve controller for controlling an opening of each of the microvalves.

13. (previously presented) The gas burner of claim 12, wherein each of the microvalves is configured to contribute to a flame when opened by the microvalve controller.

14. (original) The gas burner of claim 12, wherein the microvalve controller further comprises a pulse width modulator to modulate the opening of each of the microvalves for controlling a gas output.

15. (original) The gas burner of claim 14, wherein the pulse width modulator operates at duty cycle in the range of between 90% and 10%.

16. (original) The gas burner of claim 15, wherein the pulse width modulator operates at duty cycle in the range of between 60% and 40%.

17. (previously presented) A gas valve comprising a plurality of microvalves in parallel fluid communication with a gas burner of a cooking appliance.

18. (original) The gas valve of claim 17, further comprising a microvalve controller for controlling the opening of each of the microvalves.

19. (previously presented) A method for controlling gas flow to a gas burner comprising:

issuing a command for a desired gas flow; and

controlling opening of at least some of a plurality of independently controllable microvalves in parallel fluid communication to provide the desired gas flow corresponding to the command.

20. (previously presented) The method of claim 19, further comprising allocating a portion of the plurality of microvalves to a respective burner of a multiburner appliance.

21. (original) The method of claim 19, wherein controlling an opening of each of the microvalves comprises driving the microvalve to be fully open.

22. (original) The method of claim 19, further comprising:

issuing a feedback command to adjust the gas flow; and

adjusting the gas flow by changing the opening of at least some of the microvalves.

23. (previously presented) The gas valve of claim 17, wherein the plurality of microvalves are independently controllable.